

## IN THE CLAIMS

1-18 (canceled)

19. (currently amended) A copolymer comprising at least one grafted side chain comprising an aldehyde component and a sulfur-containing acid component or a salt thereof, wherein the copolymer is water-soluble, biologically degradable, free of aminoplast former, and based on a ~~on~~ polyamide.

Claims 20-42 (canceled)

43. (new) The copolymer as claimed in claim 19, containing the polyamide in an amount of 5 to 80 % by weight of the copolymer, the aldehyde component in an amount of 5 to 90 % by weight of the copolymer and the sulfur-containing acidic component in an amount of 5 to 60 % by weight of the copolymer.

44. (new) The copolymer as claimed in claim 19, wherein the polyamide is a natural polyamide.

45. (new) The copolymer as claimed in claim 19, wherein the polyamide is a polyaspartic acid or copolymers of aspartic and glutamic acid and mixtures thereof.

46. (new) The copolymer as claimed in claim 19, comprising a grafted aldehyde based on a member selected from the group consisting of paraformaldehyde, paraldehyde, an unbranched non-aromatic aldehyde, formaldehyde, acetaldehyde and glyoxal.

47. (new) The copolymer as claimed in claim 19, comprising a

grafted aldehyde having from 1 to 5 carbon atoms.

- 48. (new) The copolymer as claimed in claim 19, comprising formaldehyde, acetaldehyde or glyoxal.
- 49. (new) The copolymer as claimed in claim 19, containing grafted sulfur-containing acids (salts) based on inorganic sulfur salts.
- 50. (new) The copolymer according to claim 49, wherein the grafted sulfur containing acid is a sulfite, hydrogen sulfite, or a disulfite of an alkali metal, aluminum, iron or ammonium.
- 51. (new) The copolymer as claimed in claim 19, wherein the side chain further comprises at least one additional compound selected from the group consisting of a ketone and an aromatic alcohol.
- 52. (new) The copolymer as claimed in claim 51, wherein the additional compound is present in a proportion of from 5 to 85 % by weight.
- 53. (new) The copolymer as claimed in claim 51, comprising grafted ketones based on a non-aromatic ketone 2-propanone, 2-butanone or pyruvic acid.
- 54. (new) The copolymer as claimed in claim 51, comprising a grafted aromatic alcohol based on a phenol, a cresol, a catechol or a resorcin.
- 55. (new) The copolymer as claimed in claim 19, produced by graft polymerization at temperatures between -10 and 250°C.
- 56. (new) The copolymer of claim 55, wherein the graft

polymerization is conducted in the presence of a solvent.

57. (new) The copolymer of claim 55, wherein said graft polymerization is by thermal treatment.
58. (new) The copolymer of claim 19, wherein the copolymer has a molar mass  $\overline{M}_n$  of <50,000 g/mol.
59. (new) The copolymer of claim 56, wherein said solvent is a polar solvent.
60. (new) The copolymer of claim 59, wherein said polar solvent is water is dimethylsulfoxide.
61. (new) The copolymer as claimed in claim 19, containing the polyamide in an amount of 10 to 60 % by weight of the copolymer, the aldehyde component in an amount of from 10 to 70 % by weight of the copolymer and the sulfur-containing acidic component in an amount of 15 to 40 % by weight of the copolymer.
62. (new) The copolymer as claimed in claim 44, wherein the natural polyamide is selected from the group consisting of caseins, gelatins, collagens, bone glues, blood albumins and soya proteins.
63. (new) The copolymer according to claim 44, wherein the polyamide is synthetic.
64. (new) The copolymer according to claim 19, wherein the polyamide is a synthetic polyamide.